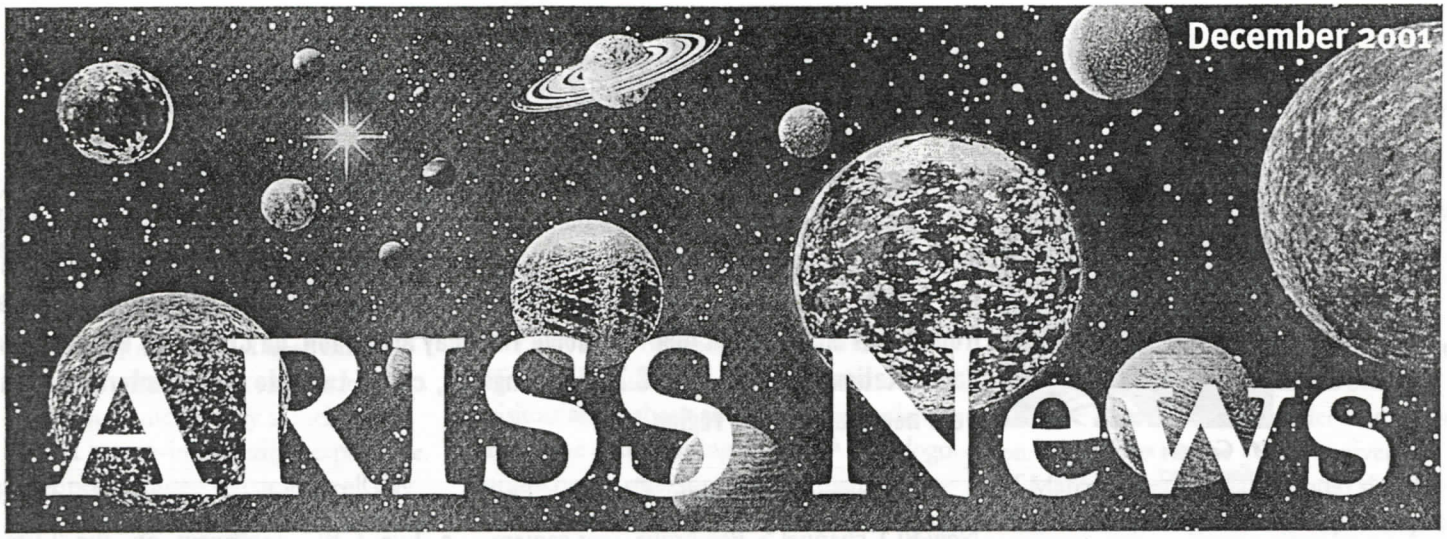


Neil Carleton ~ VE3NCE ~ ARISS Coordinating Teacher

History Was Made At R. Tait McKenzie

November-Alpha-1-Sierra-Sierra, this is R. Tait McKenzie Public School calling! History was made on Friday, November 23, when students at R. Tait McKenzie Public School made radio contact with the Commander of the International Space Station as the crew passed high overhead in orbit. R. Tait McKenzie was the second school in Canada to have students speak directly, by amateur radio, with an astronaut on the ISS. This activity was part of the Amateur Radio on the International Space Station (ARISS) School Contact Program of Radio Amateurs of Canada (RAC) and the National Aeronautics and Space Administration (NASA) in the U.S.A.

This exciting educational project, using amateur radio at school to connect students with an astronaut in space, took place at 5:46 a.m., before most students and parents are usually out of bed! By 5:30 a.m. every chair in the gym was filled, and there was standing room only along the sides and at the back. As an audience of about 400 students, families, invited guests and community visitors watched and listened, one student from each grade level (kindergarten to grade 8), took turns stepping up to the microphone and speaking directly by amateur radio with Commander Frank L. Culbertson in orbit on the space station. Each of the nine students asked a prepared question about the space station, or life in space. The answers, transmitted directly from the ISS, were heard throughout the gym by all those who came to celebrate the event.

When the last answer to the student questions was received from orbit, we still had almost 3 minutes of contact time before the International Space Station disappeared over the eastern horizon. This was unexpected, and I had to think quickly, so that's how I got to ask Commander Culbertson a question too. As a teacher of grade 6 students, it was natural for me to wonder if he had any idea when he was in grade 6 that he might be an astronaut. He replied that he read everything he could back then about space. His mother told him later that he would underline the word astronaut each time he read it somewhere.

Before the International Space Station disappeared over the horizon and out of radio range, the cheering, clapping and whistling from the audience let Commander Culbertson know this was a community event that would be remembered for many years to come.

Dr. McKenzie's Philosophy

This project embodied Dr. McKenzie's philosophy to inspire all people to achieve their best through overall health of mind, spirit and body. Through this activity, with astronauts of our time as models of this philosophy, we wanted to inspire our students to achieve their best.

Dr. McKenzie (1867-1938), who grew up in Almonte, was a world renowned physician, sculptor and educator. Two of his sports sculptures were featured on special commemorative postage stamps for the 1976 Olympic games in Montreal. Framed reproductions of these stamps, a gift from Canada Post for the official opening of our school, are hanging on the wall in the primary hall. Dr. McKenzie was recently inducted into the Canadian Olympic Hall of Fame, and is nominated for the Canadian Medical Hall of Fame. I think he'd be very pleased with the joy of effort demonstrated by this remarkable community project at our school.

High Profile Event

Mr. Carleton making a wish before contact

It was a high profile event, with media coverage by T.V., radio and newspaper. The day before our radio contact, the telephone seemed to ring all morning and afternoon with media inquiries about the project, and requests for interviews. Many people throughout the Ottawa valley heard the morning interview, and then the live afternoon interview from R. Tait McKenzie on their way home Thursday afternoon, on CFRA, 580 kHz, Ottawa. Radio station CFLY, FLY-FM, 98.3 MHz, Kingston, called twice to record interviews that were heard across the region.

Astronaut Frank L. Culbertson, Jr. (center), commander, is flanked by cosmonauts Mikhail Tyurin (left) and Vladimir Dezhurov, both flight engineers representing Rosaviakosmos.
To see this photo in brilliant colour, go to:
http://www.spaceflight.nasa.gov/station/crew/exp3/index.html

Television station CHRO, The New RO, channel 5, Pembroke, sent camera man Mike Libbos out for our early morning contact. During the day, CHRO featured our event, complete with student interviews, on the T.V. news at 8 a.m., 12 noon, 6 p.m. and 11 p.m. This was seen by a wide audience in eastern Ontario and western Quebec.

Wayne Cavanagh of Radio Station CJET FM, 92.3 MHz, Country 92, Smiths Falls, broadcast live from the school during the whole event, including an interview with Bob Clermont, VE3AKV, our Radio Contact Coordinator. An early morning audience all across the region heard about the success of our radio contact. Every hour during our contact day, Country 92 also featured two student questions and the answers they received from space.

Commander Culbertson, with his portable amateur radio transceiver, is holding the ISS callsign during a contact with students

Two of the students and I did a live CBC interview on the Ottawa Morning program, for radio station CBO, 91.5 MHz, right after our successful radio contact. This was heard by many people in the region on their way to work. Thank you to Sarah MacFadyen for making that interview possible. One of our student interviews that morning, with FLY-FM, in Kingston, was broadcast across Canada during the day by each of the CHUM network radio stations. Wow! Thank you to Tara Clow at FLY FM for making all the right connections.

News about our upcoming space project was featured by the Almonte Gazette, our weekly newspaper, on the Wednesday before our contact. A follow-up feature was published on December 5. The Record News EMC, with distribution throughout eastern Ontario, also included our radio project as a feature on the Friday before the actual contact. John Graydon covered our early morning radio connection with the ISS, and photos of two participating students were published in the November 30 issue of the EMC.

Once-In-A-Lifetime Experience

The students and staff at school talked about the radio contact all day Friday, nonstop! Those who couldn't make make it that morning found out quickly they somehow missed a once-in-a-lifetime experience. Parents continued to come by all day with thanks and congratulations to the team for such an outstanding opportunity for the students. Over the next few weeks, in front of the school at dismissal time, at the grocery store, at the post office, people continued to stop me and talk about the success of our radio contact with the International Space Station.

After our radio contact with the ISS, many students, parents and community visitors asked about another T-shirt order. Everyone that morning saw the ARISS logo and school name, in white, on the blue T-shirts of the participating students as they stepped up to the microphone and into the spot lights. The cool guys in the black T-shirts at the radio controls also proudly wore the ARISS logo and school name. Throughout the audience too were students and parents celebrating the event by wearing their special white T-shirts with the blue logo and lettering. When it was over, many people from across the community wanted to order more T-shirts as a souvenir of this remarkable event.

A special T-shirt order was placed on December 12, the 100th anniversary of Marconi's trans-Atlantic radio signal. We'll all be talking about our special space station project for years. We'll also be seeing the ARISS logo and school name around town for years to come too, whenever the warm weather brings out the T-shirts.

Tove Hunding preparing waffles in the kitchen

Student Brandon Green being served an Astronaut Breakfast in the staff room after our radio contact

Jonathan Roi and his Dad getting breakfast in the staff room

Sascha Wionzek (middle) having breakfast in the office on her way to a radio interview with Mr. C, with her body guards Emily Hunter (l) and Madeline McLaren

Internet Connections

Families all across our school board district (larger than Prince Edward Island) read about our educational project at the web site of the Upper Canada District School Board, at <http://www.ucds.on.ca>. A report about our successful radio project, along with a photo of the participating students, and a photo of Commander Culbertson with his radio on the ISS, is featured on the web site of the Almonte Radio Relay League. You can find this story at <http://www.igs.net/~va3aar/news.htm>.

News of our successful contact with the International Space Station, including a photo, is also featured at the web site of Radio Amateurs of Canada, at <http://www.rac.ca/arisnews.htm>. Our community project is also posted at the ARISS web site, at <http://rac.ca/arisnews.htm#R. Tait>. Thank you to Ken Pulfer, VE3PU, for posting the news at both the RAC and ARISS web sites.

Photos from our contact event in the gym at R. Tait McKenzie are posted on Country 92's web site, at <wysiwyg://5//http://www.country92.ca/photos/space/index.html>. The photos were taken by Country 92's popular radio host Wayne Cavanagh, who broadcast live from the school.

The live audio from the gym that morning was available around the world on the internet through Live365 streaming audio, at <http://www.live365.com/stations/ 253404>. It was also heard by amateur radio, through internet nodes, on 29 repeaters in many countries, from Australia to Alaska. Within a day, we had in fact received a reception report all the way from Australia.

Videos and Photos Wanted

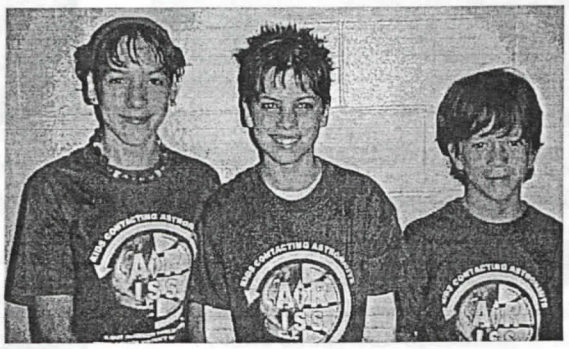
Your home video and photos of our successful contact with the ISS are needed to make a record of the project. We'd like to post photos of the event on the school's web site. We'd also like to prepare a video of the overall event, including any T.V. coverage you may have taped, that would be available later to families and community residents.

If you'll let me borrow your video, I'll deliver it to Bob Clemont, VE3AKV, our Radio Contact Coordinator. Bob will make a copy, return your original to me, and I'll make sure you get it back as soon as possible. We'd also be grateful for a copy of any photos (film and digital) you took during our contact event.

You can drop off your video and photos at the front office of the school, or deliver them to me in Room 22. Please make sure you put your name and telephone number on both your video and your photos package. Your help with this part of our project is appreciated very much.

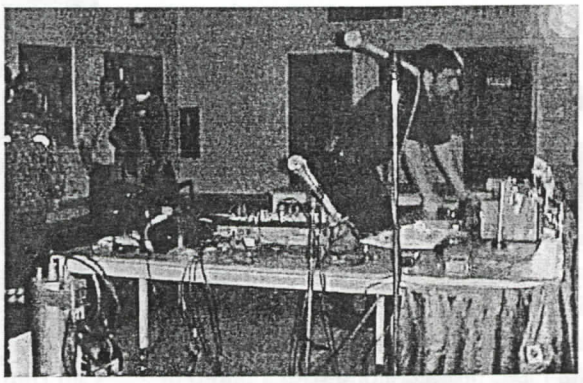
Principal Mrs. MacDonald welcoming visitors

Matthew Vibert-Adams (Grade 5), Lisa Horton (Grade 4)



Sascha Wionzek (Grade 8), Emily Barr (Grade 7), Chris MacDonald (Grade 6)

I must confess that I had little memory of the event after our contact with the ISS! It happened so quickly, and everyone on the team was so focused on their specific part of the performance. We realized later, when it was over, that we'd each missed other parts of the event. I look forward to watching your video to see the overall perspective and all the things I missed.



Radio table: the control centre for our ARISS contact

A Community Effort

Many people were involved in different ways with our community project. The platform stage, for example, was provided by the community centre. The black cloth, that became the background for our school name and the space station poster, was actually a curtain borrowed from the stage of the high school gym. The borrowed antenna equipment was hoisted up onto the school roof by Fire Chief Art Brown, using a truck from a local business. The participating students practised their questions on air from Room 22 with acting astronaut Chuck Lawrence, VE3FEJ, across town.

ARISS Logo

Nick Cameron (Grade 2), Kathryn Hallett (Grade 1), Owen Farrier (Senior Kindergarten)

Expedition 3 Patch

The Astronaut Breakfast was organized by School Council volunteers with donated food from local businesses. The T-shirts and caps for the students and team members were ordered through our local sports store. The Chair of our school board, Joan Hodge, left home in Prescott at 4:00 a.m. to drive 120 km in the dark so she could be present for the event. Many people helped to make this such a successful event.

Our school is especially grateful for the dedicated support of the Almonte Radio Relay League, through its amateur radio members on our ARISS team. With their help, our school prepared and submitted an ARISS application in February 2001. With their encouragement, I studied for, wrote and passed my amateur radio exam last winter to support our application. Since the November 1 telephone call from NASA, announcing that our contact had been scheduled, this enthusiastic team of community volunteers, headed by Bob Clermont, VE3AKV, worked very hard for the students of R. Tait McKenzie Public School. They made it happen, and they did it with such class. It looked, sounded and performed like a polished studio presentation. Everyone here is still in awe of their power to communicate with the heavens.

Our school is equally grateful for the support of the School Council. On very short notice, this team of hard working parent volunteers, headed by Past President and volunteer extraordinaire Jane Torrance, helped behind the scenes on many aspects of the project, from T-shirts and plaques for each student, to organizing a breakfast for 400 people!

I'm proud to have worked with such skilled, experienced and dedicated volunteers from all across our community. Thank you for making a dream come true!

Thank You For Your Help

Many people helped in different ways to make our project such a successful community event. Your support is appreciated very much. I've tried to include every name that I'm aware of, and I apologize in advance if I've left off, or misspelled, any name by mistake.

From left to right:

Amanda Roi
Grade 3

Owen Farrier
Senior Kindergarten

Sascha Wionzek
Grade 8

Matthew Vibert-Adams
Grade 5

Nick Cameron
Grade 2

Kathryn Hallett
Grade 1

Chris MacDonald
Grade 6

Lisa Horton
Grade 4

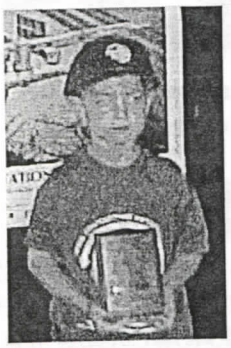
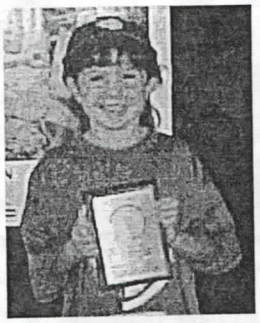
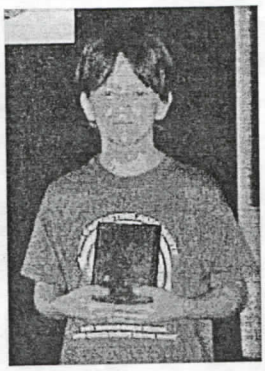
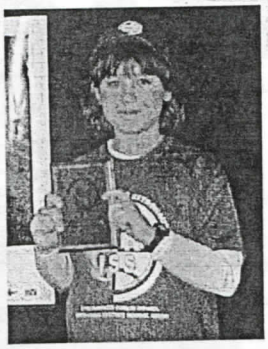
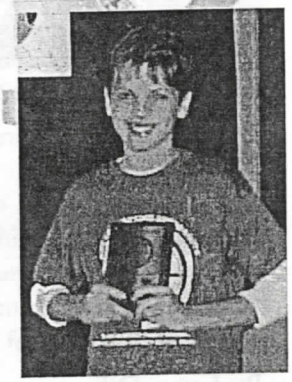
Emily Barr
Grade 7

ARISS Planning Team:
Bob Clermont, VE3AKV; Fred Chamberlain, VE3CFZ; Dale Hennigar, VE3XZT; Sandy Last, VE3AFW; Mark Ritchie, VE3DIX; Phil St. Germain, VE3CIQ; Andrew Webb, VE3UIY - they put together the technical side of our ARISS application, and they created a plan so students at R. Tait McKenzie would be able to speak directly, by amateur radio, with an astronaut on the International Space Station.

ARISS Radio Team:
Bob Clermont, VE3AKV, Radio Contact Coordinator; Travis Clermont (VE3AKV junior); Fred Chamberlain, VE3CFZ; Dale Hennigar, VE3XZT; Sandy Last, VE3AFW; Phil St. Germain, VE3CIQ; Andrew Webb, VE3UIY - with materials and equipment they loaned, borrowed or constructed, this team made it possible for us to communicate directly, by amateur radio, with the ISS, and to be heard around the world on the internet, and through amateur radio repeaters in many countries.

ARISS Mentors for R. Tait McKenzie:
Charlie Sufana, AJ9N; Will Marchand, KC6R0L - from their homes and work places in the U.S.A., they advised and they solved problems at all hours of the day and night on many aspects of our radio contact, tracked down the astronaut menus, and encouraged the R. Tait McKenzie radio team behind the scenes.

Other Amateur Radio Volunteers:
Steve McFarlane, VE3TDB - loaned equipment and advised on our ARISS application; Art Scott, VA3LEY, and Don Scott, VE3QLQ - welded the main antenna base; Paul Cassel, VE3SY, Jeff Milne, VE3EFF, and Nate, WYOX - on short notice made it possible for our contact event to be carried live around the world through the Internet Radio Linking Project (IRLP), a Canadian invention; Chuck Lawrence, VE3FEJ - as our acting astronaut across town, helped the students practice their questions on air from Room 22 at R. Tait McKenzie.

Radio Amateurs of Canada: Ken Pulfer, VE3PU - kept radio amateurs across Canada, and around the world, up to date on the news of our contact through both the RAC and ARISS web sites; Ken also provided the ISS images for this newsletter; Doug Leach, VE3XK - set up an RAC display at school, for the week of our contact, that attracted a lot of student attention.

School Council Volunteers and Other Helping Hands: Darlene Bamford; Joann Clayton; Karen and Al Deutscher; Robyn and Charlie Eagan; Karen Frew; Nancy Hall; Tove Hunding; Anjella Johnstone; Emily Kehoe; Kate McDonough; Jan Norris; Courtney Santak; Colleen Skjaveland; Sophie Tamas; Jane Torrance; Caitlan, Judy and Tesla Wilson; Doris Wionzek - these hard working volunteers, together or individually, helped with the 50/50 draw at the Christmas Craft Fair, ordered and distributed T-shirts, kept track of the funds, arranged for donations and services, posted notices around town, ran the Astronaut Breakfast, and supported our community project in a host of other ways behind the scenes.

Astronaut Breakfast Donations: Patrice's Your Independent Grocer - waffles and syrup; Thompsontown Maple Products, Springdale Farm Maple Products, Fortune Farms - maple syrup; McNeeley and Son - milk and juice; Katie Cotnam - coffee and cream; The Hub - paper plates and plastic cutlery.

Connolly & McNamara Chartered Accountants: Gary Connolly and Robert McNamara - donated, as an essential component of the project, all the duct tape we needed!

Dracks Inc.: Faith Black - produced the beautiful donated plaques for the nine participating students.

Almonte Sports: quickly delivered the T-shirts and caps so they were ready on time for the students and volunteers.

Almonte and District High School: Wayne Williams - loaned one of the school's video cameras; Bonnie Gerig - arranged for the temporary use of one of the stage curtains.

Town of Mississippi Mills: Ron Pettem, Mayor - presented each participating student with a Mississippi Mills lapel pin; Art Brown, Fire Chief - advised on safety issues, and hoisted the antenna equipment up onto the roof, and down again (in the pouring rain); Jack McKay - delivered, delivered again, and returned the portable stage to the Community Centre.

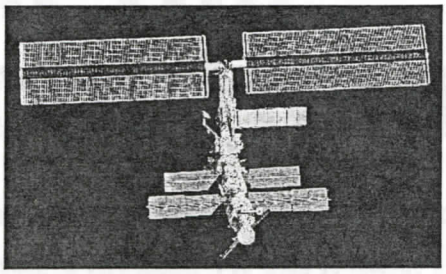
CDS Movers: Davey Drummond - loaned a truck twice so Art Brown could hoist our equipment up onto and off the school roof.

Killdara Corporation: John Ogilvie - loaned the company's magnificent data projector that allowed everyone in the gym to follow the progress of the International Space Station across North America.

Upper Canada District School Board: Joan Hodge, Chair - left home at 4:00 a.m. to be present for the contact event; Gino Giannandrea, Director of Education - supported our special project with a financial contribution from the UCDSB towards the T-shirts and caps of the participating students and volunteer teams; Terry Simzer, Public Relations – prepared and distributed press releases to media offices with background information about our project, then sent new information to our media contacts when our rendezvous date and time with the ISS had been confirmed by NASA; Gord Buchan and Gary Errett, Physical Plant – came to the school and advised on building questions.

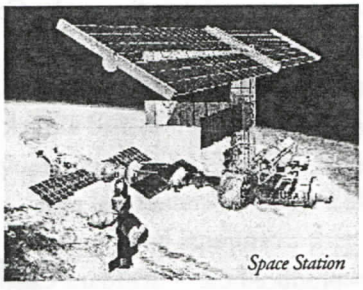
R. Tait McKenzie Public School: Pat Lotan, Office Administrator - with patience beyond duty, answered telephone calls, took messages, tracked me down for live interviews, opened the school on weekends for the radio team, and was there to staff the switchboard at 5:15 a.m.; Aurella Chase and Ashely Phillips (Co-op Student) - answered with a smile countless telephone calls and kept track of all my messages; Jim Barber, Head Custodian – helped in many, many ways, especially during the hectic pace of the final days, and was already on duty to help with final details by the time I noticed at 5:15a.m.; Sylvia and Larry Croswell - with warm smiles and friendly greetings, welcomed all our visitors at the front door; Jane Veninga - calmed the early morning jitters of participating students and guided them on and off the stage.

Other Community Volunteers: Lucy Carleton - put up all the space posters late Thursday night; Ian Carleton - stayed very late the night before to help solve problems, and arrived very early on our contact morning to help wherever I needed him; Ron Ayling and Mike Kehoe - loaned their lap top computers for the operation of the project; Noreen Young - offered to help if we needed more black background for the ISS poster and school banner.



Space Station

Mississippi Valley Conservation: Kristy Giles - on short notice, set up a display about Dr. R. Tait McKenzie that attracted a lot of student attention during the week of our radio contact.



Space Station

Canadian Space Agency: provided (1) all the posters, about Canadian astronauts and Canada's role in the space program, that visitors studied on the gym walls before and after our radio contact with the ISS; (2) CSA stickers and bookmarks, along with photos and pictures of Canadian astronauts and the ISS for each student and staff member at R. Tait McKenzie (to be distributed at our special ARISS assembly on January 8, 2002); (3) special certificates for the participating students (January 8 assembly).

Neptec: donated pictures of Canadian astronauts, with the image of the International Space Station, that visitors found on their chairs when they arrived for our early morning radio contact.

Media: T.V. CHRO, Pembroke, channel 5 **Radio** CBO, Ottawa, 91.5 FM; CFLY Kingston, 98.3 FM; CFRA, Ottawa, 580 kHz; CJET, Smiths Falls, 92.3 FM **Newspaper** The Almonte Gazette; The Record News EMC. – in print and on the airwaves, they carried the story of our community project to readers, listeners and viewing audiences from the Ottawa Valley to the St. Lawrence Valley, and across Canada.

Design and production of this special newsletter: Eileen Hennemann and Allan Stanley

Neil Carleton ~ VE3NCE
ARISS Coordinating Teacher
R. Tait McKenzie Public School
175 Paterson Street,
Almonte, Ontario
Canada K0A 1A0